

ORGANIZATIONAL CAPACITY FOR CHANGE IN INDONESIAN PUBLIC RESEARCH AGENCY

LASTIWI DANARSIWI¹, CHANDRA WIJAYA² and PANTIUS SOELING³

^{1, 2, 3} Faculty of Administrative Science, University of Indonesia, Indonesia. Email: ¹danar.goen@gmail.com, ²wijayachandra@yahoo.com, ³pantiusdrahen@gmail.com

Abstract

Organizational Capacity for Change (OCC) is the capital for an organization to make changes. Change is a need for all organizations in the world, both public and private, to adapt to the era. One of the organizations that are required to change is research agencies. This study was conducted to determine the level of OCC at the National Research and Innovation Agency (BRIN) in Indonesia, during its transformation to achieve high performance (High Performance Organization/HPO). This study uses OCC and HPO theory. This study used purposive random sampling technique. The number of samples is 334 officers and researchers of BRIN. Research data were analysed using PLS-SEM (Partial Least Square-Structural Equation Model). The results showed that the OCC and HPO levels at BRIN were in the high category. The dominant factor in OCC at BRIN is an involved mid-management, trusting follower and capable champions. While the dominant factors in HPO are management quality, continuous improvement, and openness and action orientation. OCC is proven having a significant effect on HPO in BRIN. The research recommends BRIN to improve the communication system, knowledge sharing and continuously innovate its competencies. Future research is recommended to be carried out on the organizations that are in the phase of changing with dimensions and indicators of OCC and HPO which have been validated in this study.

Keywords: Organizational Capacity for Change; High Performance Organization; Communication System; Knowledge Sharing; Innovation.

INTRODUCTION

Organizational Capacity for Change (OCC) is a capital for an organization in its phase of changing. BRIN as the public research agency in Indonesia has been experiencing of change for the past of five years. This changing is very hard and emerge the turbulences in this organization. If the capacity of this organization is high, the organization will be success in passing this period.

Organizational change is a core concept in strategic management, organizations must change to survive in environments characterized by technological and scientific progress, rapid communication and intense competition (Edmondson, 2016). The concept of OCC itself comes from William Judge and Elenkov (W. Q. Judge & Elenkov, 2005) who stated that OCC is a dynamic organizational capability that allows the enterprise to adapt old capabilities to new threats and opportunities, as well as create new capabilities. OCC refers to eight dimensions.

They are trustworthy leadership, trusting followers, effective communication, innovative culture, accountable culture, systems thinking, involved mid management and capable champions.

In its era of changing, BRIN must be empowering these dimensions so that this agency can survive and even reach its high performance. BRIN was experiencing the turbulences during





its changing. The problems faced by this agency were the untrusting senior researchers to the chairman and management during two years, they even go to the House of Representatives to complain about this fast changing which disturb the personnel and financial functions and make problems in the redistribution of employees.

The management itself is very confident that this changing is necessarily done to make this organization survive and achieve the high performance. And also the changing has complies with the laws and regulations issued by the government i.e. the law no. 11 of 2019 concerning the National System of Science and Technology, Law No. 5/2014 concerning State Civil Apparatus, Presidential Decree No. 11/2017 concerning Management of State Civil Apparatus, Presidential Decree No. 30/2019 concerning Assessment of Work Performance of State Civil Apparatus and the newest is Presidential Decree No. 78/2021 regarding the establishment of a National Research and Innovation Agency (BRIN).

The issues about the pros and cons of the changing of this public research organization requires the authors to conduct the research on OCC of BRIN. According to Judge et al any investigation of the sources of competitive advantage within a transition economy should begin with an examination of the organization's internal resources and capabilities for addressing these dramatic and ongoing institutional changes (W. Q. Judge et al., 2009).

The author will measure the level of organization's internal resources i.e., OCC of BRIN to reach its HPO. From this matter, the authors propose 3 research questions i.e.

- 1. How is the level of OCC and HPO in BRIN?
- 2. What is the dominant factors of OCC and HPO in BRIN?
- 3. How does the Organization Capacity for Change (OCC) influence the High Performance Organization (HPO) at the National Research and Innovation Agency?

MATERIALS AND METHODS

Organizational Capacity for Change

According to Judge and Elenkov (W. Q. Judge & Elenkov, 2005) the OCC variable is explained with 8 dimensions, namely: Trustworthy leadership, trusting follower, involved mid-management, capable champions, accountable culture, innovation culture, systems thinking, and effective communication.





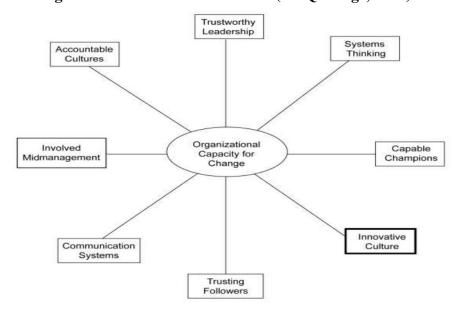


Figure 1: The dimensions of OCC (W. Q. Judge, 2013)

Judge has published several books and articles about OCC, all the publications has point on the dimensions and indicators to measure the internal resources of the organization which experience change. The 8 dimensions are explained with 32 indicators, as follows:

- 1) Trustworthy leadership; continue to maintain the organization's core values when commanding change, demonstrate humility while pursuing a vision for the future, consistently provide information on the vision for the future, show courage to support the changes being implemented.
- 2) Culture of innovation through recruit and retain creative people, provide resources to experiment with new ideas, allow employees to take risks and not blame them, if it fails, value innovation and change
- 3) Communication system in all work units, on time, from stakeholders to organizations, from leaders to employees.
- 4) Mid management; demonstrate commitment to health/health/well-being of the organization, maintain a balance between tasks and change initiatives when work is carried out. Voice differences of opinion well, connect effectively between leaders and employees.
- 5) Trusting followers; Employees Know in broad outline how the change will advance the institution, View the leadership as trustworthy people, Have the opportunity to voice their concerns/objections/considerations about the change plan, Open up to the change plan
- 6) Accountable culture; adhere to deadlines and honour commitments Get consequences for their actions Accept responsibility for getting work done Have a clear role to do





what for whom

- 7) Capable champions; Capable champions who gain respect from employees, have good interpersonal skills (i.e.: skills in relationships with others, both in verbal and non-verbal communication with the aim of developing work optimally), willing and able to change status quo, have the will and creativity to bring about organizational change
- 8) Systems thinking; change champions recognize the Interdependent systems implications of change, the Importance of institutionalizing change, the need to realign incentives with desired changes, Value of addressing causes rather than symptoms.

This theory has been used by many researchers. Adna and Sukoco (Adna & Sukoco, 2020) has discover that OCC as a mediating variable in the relationship between Managerial Cognitive Capabilities and performance organization.

William Judge has published articles about OCC since 2005. In 2009 he develop a reliable and valid measure of an organization's capacity for change (OCC)(W. Judge & Douglas, 2009). Heslin (Heslin & Marr, 2008) describes strategies to enhance organizational capacity through a largescale role redesign initiative. Innovation for change strategies were used as the framework to guide the change.

Several studies have proven the significance of the relationship between the dimensions of OCC and HP. The study by Judge et al. (W. Q. Judge et al., 2009) on Russian companies found a positive relationship between OCC and Organizational Performance (OP), which was strengthened with a high level of uncertainty in the organizational task environment. It also stated that OCC is the main variable in organizations of various sizes.

This opinion was supported by Ramezan (ramezan et al., 2013), which proved a significant, positive, and strong relationship between the eight dimensions of OCC proposed by Judge et al. (2009) and the six Organizational Performance (OP) dimensions put forward by Lee (2008).

Sukoco (2022) investigated about the effect of market orientation on OCC (learning, process and context), as well as the impact of OCC on organisational performance

HPO

According to the most prolific researcher writing about HPO, André A. de Waal (de Waal & Heijtel, 2017) HPO is an accountable organization, adaptive, agile, or flexible company, a high-performance organization or system, a reliable organization, a smart company, alongside a resilient, responsive, strong, and sustainable organization.

There are many expert that have done the research about HPO, i.e. Potter (2006), There is a publication that have analyses major HPO literature in popular books and peer-reviewed articles published in English in the period between 1982 and 2019. They concluded that most scholars considered HPO as continuous attempts of organizations to not only enhance organizational performance but also sustain responsiveness and competitiveness to the market place.

Porter investigated about 'Best practice' HRM specifies certain HR practices that purport to





lead to improved organizational performance. He emphasized that the organization must focus on its 'core' activities. Then organizational structure and systems must complement and support flexibility.

The emphasis is placed on horizontal communication and a broad dissemination of information. This permits small self-managing (autonomous) or part-managing teams to operate and take more responsibility. There is less emphasis on vertical communication typified by hierarchical structures (PORTER, 2006) Do and Mai reviewed all publication about HPO (Do & Mai, 2020) from 1982 until 2020.

They concluded that literature on HPO has evolved in four phases, The first focused on the definitions and conceptual development of HPO, In the second phase, research focused on describing characteristics of HPO and identifying approaches to achieve HPO, The third phase is an empirical validation trend where the research focused on evaluating the applicability of HPO and testing the relationships between HPO and its antecedents.

HPO research is currently into a fourth phase where scholars applied more complicated research models and designs to go beyond simple linkage with antecedents to understand the outcomes and mediating mechanism of HPO.

Data Collection

This study used a purposive random sampling technique purposive sampling. According to Dana P. Turner (Turner, 2020) is carried out if the researcher wishes target specific individuals with characteristics of interest in research, so that the sampling technique used in this study is taking samples according to the research objectives. Random sampling or random sampling, also called haphazard, is not indiscriminately or indiscriminately, so that all elements of the population have opportunity to become a research sample. So that all BRIN researchers and Structural officials have the same opportunity to be sampled.

The number of research respondents was 334 including structural and functional officials at BRIN environment. The first step the researcher did was send an email to BRIN officials and researchers as many as 1566 emails. The questionnaire is attached in contents of the e-mail. The contents of the questionnaire include the identity of structural officials/researchers, willingness to fill out the questionnaire, and statement items that must be selected by respondents according to their circumstances. Apart from that, researchers also involve researchers who are members of the Whats App Group of researchers in their respective expertise to speed up data collection.

Nevertheless, that response entry is very limited. Given these constraints, the next step is the researcher sending WhatsApp messages to the contact numbers of the respondents one by one. In this way the number of respondents who answered the questionnaire became more and more and the response is faster. Data collection was carried out from 15 June 2021 to January 6, 2022. In the end, 334 responses were received. Determination the number of samples from the population in this study uses the Isaac formula and Michael. Based on Isaac and Michael's table for a population of 1500 with an error rate of 5%, the number of research samples was 286 (see





attachment 1). While in this study the population reached 1566 and the sample research into 334 people.

RESULTS AND DISCUSSION

The result is as follows

The construct used in the study is a multidimensional construct, the results of the analysis of the research model can be seen in Figure 1. The construct consists of two levels, namely the first order construct and the second order construct. The first order construct is the affirmative variable of the second order construct. While the second order construct is the main variable in the observation.

In this study, the second order construct includes organizational performance and organizational change capacity which will be emphasized by several first order constructs. While the first order construct is emphasized by several indicators. After the SEM model is formed, then the feasibility test of the model is carried out. The feasibility test of the model is carried out on the outer model and inner model.

Evaluation of the outer model is carried out to evaluate the relationship between the indicators and the first order construct. While the evaluation of the inner model is carried out to evaluate the relationship between the first order constructs and the second order constructs and evaluate the relationship between the second orders constructs.

The SEM-PLS analysis method is used to determine the effect of exogenous latent variables, namely the capacity of organizational change on endogenous latent variables, namely organizational performance processed with SmartPLS 2.0 software. The construct used in the study is a multidimensional construct, the results of the analysis of the research model can be seen in Figure 2.

The construct consists of two levels, namely the first order construct and the second order construct. The first order construct is the affirm variable of the second order construct. While the second order construct is the main variable in the observation. In this study the second order construct includes organizational performance and organizational change capacity which will be emphasized by several first order constructs.

While the first order construct is emphasized by several indicators. After the SEM model is formed, then the feasibility test of the model is carried out. Testing the feasibility of the model is carried out on the outer model and inner model. Evaluation of the outer model is carried out to evaluate the relationship between the indic

ator and the first order construct. While the evaluation of the inner model is carried out to evaluate the relationship of the first order construct to the second order construct and evaluate the relationship between the second order constructs.





DOI 10.17605/OSF.IO/USG7W

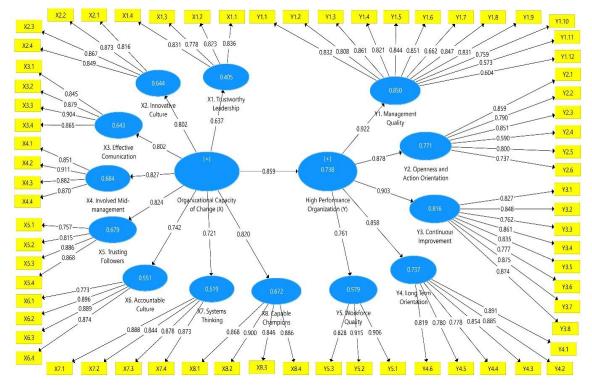


Figure 2: Model of the Impact of Organizational Change Capacity on Organizational Performance (source: results of primary data processed by smart PLS

The research find that

CONCLUSIONS

1. The Organization Capacity for Change (OCC) level at BRIN is in the high category with an average percentage score of 75.41. However, there are dimensions that are categorized in medium criteria, namely the communication system. This means that BRIN already has good organizational change capacity. There is a need for improvement in the communication system concerning information flowing more effectively from leaders to employees in a timely manner, to all concerned work units and from organizational stake holders to the leaders and employees involved. Triangulation of data through an open questionnaire showed that the researchers agreed that the communication system at BRIN both vertically (top-down and bottom-up), horizontally (between employees, between leaders), and laterally (employees/leaders to other stakeholders) has been running well. Good. In this case BRIN already has a well-developed system, with the existence of an IT system, Intra, and Electronic Office Manuscripts. Intra BRIN is an information system for BRIN's internal needs so that it supports BRIN's business processes and all information systems in BRIN are well integrated. Through deepening (open questionnaire) to researchers, insights were obtained that communication was quite open for the same level,





while laterally it was in the process of realignment with the merging of 5 entities to become BRIN. BRIN was formed during the Covid-19 Pandemic, so apart from the transition with a new organization there was also a transition with new WFO/WFH habits. However, in both transitions, the communication system between entities at BRIN was able to run well, because there was communication technology and employees were also used to it and didn't have too many problems with using tools. The flow of assignments, reports, and discussion rooms runs well.

- 2. BRIN's performance level is also categorized in the high criteria with a score of 74.10. This means that BRIN's performance as measured by the dimensions of management quality, openness and orientation to action, continuous improvement and renewal, long-term orientation and quality of human resources has been good. However, there are several indicators that need to be of concern to the organization, namely organizational management guiding members of the organization to achieve better results where as many as 44 respondents (13.18%) respondents stated that they did not agree. Organizational management is very effective, there are 47 respondents (14.07%) who disagree. Organizational management often conducts dialogue with employees, 55 respondents (16.46%) disagree. Members of the organization spend a lot of time for communication, exchange of knowledge and learning 59 respondents (17.66%) disagree. Organizational members are involved in important processes 74 respondents (22.15%) do not agree. Organizational management tolerates mistakes 53 respondents (15.86%) do not agree.
- 3. Within the BRIN organization, the most tenacious capacity for organizational change is most determined by mid management, which reflects the greatest interrelation in describing organizational change capacity (loading factor value 0.827), employees who believe in leaders (0.824), and competent change pioneers (0.820). The level of involvement of mid management is high with the highest indicator in mid management showing commitment to health/organizational welfare. And the lowest indicator on connecting effectively between leaders and employees. The level of organizational change capacity on the dimension of employee trust in leaders is in the high category with the highest indicator is on opening up with a change plan.
- 4. In organizational performance variables, the most dominant dimension is management quality which reflects the greatest interrelationship (factor loading value of 0.922), then continuous improvement and renewal (0.903), and openness and action orientation (0.878). Management quality is the most dominant dimension in determining organizational performance variables with the highest indicator on organizational management being a role model for members of the organization and the lowest indicator on organizational management giving sanctions to those who do not perform well. Continuous improvement and renewal is the second dominant factor in determining organizational performance with the highest indicator being that the organization continuously innovates its core competencies and the lowest indicator being that organizational processes continue to be simplified.





5. Organizational change capacity is proven to significantly influence organizational performance. The higher the organizational change capacity, the higher the organizational performance. Organizations with a high capacity for change tend to have higher performance opportunities than organizations with no capacity for change at all.

References

- Adna, B. E., & Sukoco, B. M. (2020). Managerial cognitive capabilities, organizational capacity for change, and performance: The moderating effect of social capital. Cogent Business and Management, 7(1), 1–23. https://doi.org/10.1080/23311975.2020.1843310
- 2) de Waal, A., & Heijtel, I. (2017). Developing a change approach for the transition to a high performance organization. Measuring Business Excellence, 21(2), 101–116. https://doi.org/10.1108/MBE-03-2016-0015
- 3) Do, T. T., & Mai, N. K. (2020). A systematic review on high performance organization. Management Research Review. https://doi.org/10.1108/MRR-11-2019-0495
- 4) Edmondson, A. C. (2016). The Palgrave Encyclopedia of Strategic Management. The Palgrave Encyclopedia of Strategic Management, 1–5. https://doi.org/10.1057/978-1-349-94848-2
- 5) Heslin, K., & Marr, J. anne. (2008). Building organizational capacity for change. Healthcare Management Forum / Canadian College of Health Service Executives = Forum Gestion Des Soins de Santé / Collège Canadien Des Directeurs de Services de Santé, 21(4), 44–49. https://doi.org/10.1016/S0840-4704(10)60055-5
- 6) Judge, W., & Douglas, T. (2009). Organizational change capacity: The systematic development of a scale. Journal of Organizational Change Management, 22(6), 635–649. https://doi.org/10.1108/09534810910997041
- 7) Judge, W. Q. (2013). Focusing on Organizational Change. 173.
- Judge, W. Q., & Elenkov, D. (2005). Organizational capacity for change and environmental performance: An empirical assessment of Bulgarian firms. Journal of Business Research, 58(7), 893–901. https://doi.org/10.1016/j.jbusres.2004.01.009
- 9) Judge, W. Q., Naoumova, I., & Douglas, T. (2009). Organizational capacity for change and firm performance in a transition economy. The International Journal of Human Resource Management, 20(8), 1737–1752. https://doi.org/10.1080/09585190903087107
- 10) PORTER, K. (2006). High performance organizations. Leadership and Management, 5–36. https://doi.org/10.1016/b978-0-7506-6794-4.50008-9
- 11) Turner, D. P. (2020). Sampling Methods in Research Design. Headache, 60(1), 8–12. https://doi.org/10.1111/head.13707.
- 12) Attachment 1. Table of determining the number of samples of Isaac and Michael from certain population with an error rate of 1%, 5%, 10%





DOI 10.17605/OSF.IO/USG7W

N	S			N	S			N	S		
	1%	5%	10%	N	1%	5%	10%	N	1%	5%	10%
10	10	10	10	280	197	115	138	2800	537	310	247
15	15	14	14	290	202	158	140	3000	543	312	248
20	19	19	19	300	207	161	143	3500	558	317	251
25	24	23	23	320	216	167	147	4000	569	320	254
30	29	28	27	340	225	172	151	4500	578	323	255
35	33	32	31	360	234	177	155	5000	586	326	257
40	38	36	35	380	242	182	158	6000	598	329	259
45	42	40	39	400	250	186	162	7000	606	332	261
50	47	44	42	420	257	191	165	8000	613	334	263
55	51	48	46	440	265	195	168	9000	618	335	263
60	55	51	49	460	272	198	171	10000	622	336	263
65	59	55	53	480	279	202	173	15000	635	340	266
70	63	58	56	500	285	205	176	20000	642	342	267
80	71	65	62	600	315	221	187	40000	563	345	269
35	75	68	65	650	329	227	191	50000	655	346	269
90	79	72	68	700	341	233	195	75000	658	346	270
95	83	75	71	750	352	238	199	100000	659	347	270
100	87	78	73	800	363	243	202	150000	661	347	270
110	94	84	78	850	373	247	205	200000	661	347	270
120	102	89	83	900	382	251	208	250000	662	348	270
130	109	95	88	950	391	255	211	300000	662	348	270
140	116	100	92	1000	399	258	213	350000	662	348	270
150	122	105	97	1050	414	265	217	400000	662	348	270
160	129	110	101	1100	427	270	221	450000	663	348	270
170	135	114	105	1200	440	275	224	500000	663	348	270
180	142	119	108	1300	450	279	227	550000	663	348	270
190	148	123	112	1400	460	283	229	600000	663	348	270
200	154	127	115	1500	469	286	232	650000	663	348	270
210	160	131	118	1600	477	289	234	700000	663	348	270
220	165	135	122	1700	485	292	235	750000	663	348	271
230	171	139	125	1800	492	294	237	800000	663	348	271
240	176	142	127	1900	498	297	238	850000	663	348	271
250	182	146	130	2000	510	301	241	900000	663	348	271
260	187	149	133	2200	520	304	243	950000	663	348	271
270	192	152	135	2600	529	307	245	1000000	664	349	272

